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FRUITS AND VEGETABLES: PROBLEMS OF THEIR DELIVERY TO THE CONSUMER AND SOLUTIONS

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ABSTRACT

Agricultural production occupies one of the leading places in the republic, which in 2018 accounts for 32.4% of the total GDP, 6.4% of investments, is employed in this area, and 26.6% of the total employed population in the country's economy.

Keywords: yield of fruits, transportation, perishable cargo, passenger aircraft

1. INTRODUCTION

In this area, 195103, 7 billion rubles were produced. Of the total gross output, crop production accounts for 50.4%. During the year under review, the republic produced 2911.9 thousand tons of potatoes (104.2% compared to 2017), vegetables 9760.3 thousand tons (95.5%), melons 1837.0 thousand tons (90.4%), fruits and berries 2706.2 thousand tons (103.5%), grapes 1589.8 thousand tons (87.8%). Limited water resources and deterioration of soil conditions caused a drop in the yield of certain types of fruits and berries. So, in 2018 to 2015 the yield of fruits and berries decreased by 5.1%, vegetables by 12.6%, and by 2017, the yield of vegetables decreased by 13.5%, the yield of melons decreased by 10.1%, while the yield of potatoes and grapes increased by 2.6% and 18.3%, respectively.

All produced fruit and vegetable products are used in the following areas:

- sent to the local market for sale to the population;
- exported to foreign countries;
- It is laid down for long-term storage, after which it is sent to the trade network of cities and villages of Uzbekistan and for export for consumption;
- It is sent for industrial processing to local enterprises of the processing industry.

Fruit and vegetable products are one of the export items. Thus, in 2016, the export of fruits and vegetables in the total amount of exports was 4.6%, which by 2018 increased to 6.3%. The growth in the volume of exports of these products urgently requires solving some problems associated with the delivery of this cargo to the consumer. During the delivery period, fruit and vegetable products pass through several organizations: from farmers or deckhand farms, procurers, transport workers, a retail network and to consumers.

2. METHODS

To ensure the quality of the delivered products, it is necessary to:

- collect products from the fields without causing those bruises, damage, etc.;
- calibrate products by size;
- sort them by biochemical composition;
- pack all products, observing the integrity of the calibration groups, according to the biochemical composition;
- All groups must undergo pre-cooling, taking into account the established temperature regime based on the biochemical composition, for each product group;
- organize the delivery of cargo to the support station. Depending on the distance of transportation of fruits and vegetables to the base station, covered flatbed cars or refrigerated trucks are used. In this case, cargo operations must be performed either using appropriate equipment or using movers. When performing cargo operations, movers should know that when performing a cargo operation, it is necessary to gently load the cargo into a car or wagon without fuss. The above type of work typically performed by farm with the participation of its employees (deckhand and his staff) and his farm or caterer who hires people to carry out the above works and organizes work in an agricultural enterprise.

The second stage of shipment of fruits and vegetables to the consumer includes the following types of work:

- the selection of the type of transport for the organization of cargo transportation is carried out taking into

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account the distance of transportation, the initial quality of fruits and vegetables presented for shipment. Three types of transport can take part in the transportation of fruits and vegetables: road, air and rail;
- when choosing the type of transport, special attention is paid to the type of rolling stock, which should meet the requirements described in the relevant rules of cargo transportation as best as possible.
The next stage of delivery of fruits and vegetables to the consumer is the acceptance of cargo by representatives of the railway. At this stage, the quality of the cargo is checked – a biochemical and microbiological analysis, the results of which are compared with the data of the quality certificate presented by the sender of the cargo.
Long-distance transportation is the main link in the delivery chain. Until recently, the main carrier of fruits and vegetables was rail transport, which accounted for 90-95% of the total volume of transportation of these goods for export. After the Presidential Decree, which allowed the export of fruit and vegetable products on the basis of direct contracts, the volume of transportation of fruits and vegetables by rail began to decline. Buyers Began To arrive in the republic with their own vehicles for the export of cargo. In addition, local individuals began to participate in transportation, buying fruits and vegetables and hiring a motor vehicle. It should be noted that individuals who were not engaged in this type of activity have little knowledge of the procedure for organizing such transportation, with their features, which leads to significant losses of cargo during transportation. In fairness, it should be noted that they take all the losses on themselves. However, such delivery of fruits and vegetables to the consumer significantly undermines the clientele's confidence in the quality of the goods, since the delivered cargo does not have the proper presentation.
A special feature of road transport when servicing the export of fruits and vegetables is:
- Delivers cargo on the principle of "door - to-door", that is, transportation is carried out from the territory of a farm or dean farm to the consumer;
- The driver is the freight forwarder responsible for the safety of the goods;
- The speed of cargo delivery by road is higher than by rail. The higher speed is due to the fact that the vehicle moves without stopping on the way, due to the fact that two drivers are driving the vehicle, replacing each other.
High speed delivery of fruits and vegetables to the consumer is distinguished by air transport, which has a high speed of movement, which best meets, the requirements for the delivery of perishable cargo. However, this type of transport is not justified; it is far from these transportations. The reason for this situation is the amount of tariffs for the transportation of goods. But, nevertheless, it is possible to use this type of transport for these transportations.
Fruit and vegetable products are produced in farms and dean farms, that is, they are characterized by small-batch production. Analysis of passenger transport showed that in many directions of flight, this type of transport has a commercial load of 50 to 60%, and in some directions 35-40%, which allows you to use this type of transport for the transportation of fruits and vegetables in the directions of flights. In this case, the main problem is the level of the transportation tariff. According to the old current tariff, no one will want to carry out the transportation of fruits and vegetables. The solution to this issue can be the shipment of fruits and vegetables by passenger flights, which will not only deliver perishable goods to the consumer, but also increase the efficiency of using air transport. In this case, the question arises about the level of the tariff for the transportation of unloaded cargo on a passenger flight. How to calculate the value of the tariff for cargo transportation in passenger aircraft loaded as a preload?

3. RESULTS

The calculation of the new tariff for the transportation of fruits and vegetables on aircraft operating a flight with passengers is carried out as follows:
a) Determine the amount of additional salary of flight personnel;
b) Additional fuel costs;
c) Additional depreciation charges for the loaded cargo;
d) Costs for performing cargo operations at departure and arrival airports.
The salary of the flight crew consists of two components: the fee for flying hours and ton-kilometer earnings. A passenger flight departing from Tashkent or another airport in Uzbekistan must arrive at its departure airport in a timely manner, as it may be tied to a flight in another direction. Therefore, the flight time of the crew with

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loaded fruits and vegetables will not increase and, of course, does not require additional payment.

Loading several tons of cargo into a passenger flight makes it difficult to control the aircraft due to the increase in its mass, which will cause the payment of additional funds to the flight crew. Additional tone-km is calculated based on the volume of loaded tons and the flight distance, i.e.:

$$PL= \Sigma Q*L$$

Q – Volume of fruits and vegetables loaded on a passenger flight in tons;
L – Flight distance of the flight to the destination airport, km.
The amount of additional wages is determined only for additional ton-kilometers:

$$Z = PL*Ctkm$$

PL-ton-kilometers associated with overloaded fruits and vegetables;
Ctkm-the tariff rate for each completed t-km, amounts.
Additional fuel costs and depreciation charges for the transportation of unloaded cargo are set as follows.

4. CONCLUSION

The additional load increases the fuel consumption for accelerating the aircraft on the runway due to the increased weight. Fuel Consumption also increases during the entire flight.

The load on the airframe increases, which makes it necessary to allocate from the total amount of depreciation deductions that part of it that must be attributed to the additional cargo carried.

Fuel consumption and depreciation can be divided into three parts.

Fuel costs are allocated to:

- Fuel consumption for acceleration and maintenance of the glider itself in the air;
- Fuel costs for transportation of passengers with hand luggage;
- Fuel costs associated with the transportation of additional cargo.

Depreciation charges are also divided into:

- increased wear of the airframe due to the additional load on it of overloaded fruits and vegetables on a passenger flight;
- Depreciation charges for the carriage of passengers and hand luggage;
- Depreciation charges that must be attributed to the flight of the glider itself.

Fuel costs and depreciation charges are distributed in proportion to the weight of the glider, passengers with hand luggage and additional cargo.

The total amount of costs is determined by summing up the above costs. To obtain the rate for transportation of fruits and vegetables in a passenger flight needs to the calculated transportation costs to improve profit margin, i.e. profit, which was used to calculate the total fare for transportation of passenger's cargo.

Calculations have shown that the value of the tariff for the transportation of fruits and vegetables can be reduced by 35-40% of the fee charged by Aeroflot for each kilogram in excess of the established norm for passenger hand luggage.

When you alert clientele about the reduced tariff for transportation of fruits and vegetables by flights departing from airports in Uzbekistan, senders will actively load the planes with their products, which will ensure full load of departing aircraft, which will increase the commercial load. This helps to increase the efficiency of using not only air transport, but also helps to accelerate the delivery of cargo to the consumer by:

- reducing cargo losses by loading fruits and vegetables of different biochemical composition into one car, as well as waiting for the cargo to form a full-fledged volume equal to the load capacity of the car;
- Acceleration of cargo promotion from the manufacturer to the consumer.

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